

19. (Thrice Amended) Isolated monoclonal antibodies, which can be obtained from hybridomas by a method comprising:

fusing non-secreting murine myeloma cells with spleen cells from mice immunized against an inactivated strain of the species *Taylorella equigenitalis* (*T. equigenitalis*) or extract(s) of such a strain,

cloning and selecting according to the capacity of their culture supernatant to recognize an epitope or epitopes of a bacterium of each of seven wild-type strains of the species *T. equigenitalis*, and to not exhibit a crossed reaction with *Klebsiella pneumoniae*, *Pseudomonas fluorescens*, *Staphylococcus aureus*, *Streptococcus equi*, *Pasteurella haemolytica*, *Pasteurella multocida*, *Pseudomonas aeruginosa* and *Actinobacillus equuli*,
recovering the monoclonal antibodies, and
optionally purifying said monoclonal antibodies.

23. (Twice Amended) A method of obtaining monoclonal antibodies according to claim 21, comprising:

fusing non-secreting murine myeloma cells with spleen cells from mice immunized by means of monoclonal antibodies or their Fv, Fab, and F(ab')₂ fragments, which recognize an epitope of a bacterium of the species *T. equigenitalis*, and which do not exhibit a crossed reaction with at least *Klebsiella pneumoniae*, *Pseudomonas fluorescens*, *Staphylococcus aureus*, *Streptococcus equi*, *Pasteurella haemolytica*, *Pasteurella multocida*, *Pseudomonas aeruginosa* and *Actinobacillus equuli*,

screening hybridomas whose culture supernatants exhibit a positive reaction with one of the said monoclonal antibodies or their fragments,
selecting by cloning the hybridomas, and
recovering the required anti-antibodies.

26. (Twice Amended) A method of identification of a bacterium of the species *Taylorella equigenitalis* (*T. equigenitalis*) in a specimen or in a culture comprising:

bringing the specimen or the culture to be analyzed, which may contain *T. equigenitalis*, into contact with an effective quantity of at least one monoclonal antibody or Fv, Fab, or F(ab')₂ fragment thereof according to claim 17, under conditions permitting a reaction of the antigen-antibody type, and

detecting any product formed in a reaction of the antigen-antibody type.

27. (Amended) A method of identification of a bacterium of the species *Taylorella equigenitalis* (*T. equigenitalis*) in a specimen or in a culture comprising:

bringing the specimen or the culture to be analyzed which may contain *T. equigenitalis* into contact, under conditions permitting a reaction of the antigen-antibody type, with an effective quantity of a compound selected from the group consisting of an immunogenic protein and a monoclonal anti-antibody or Fv, Fab, and F(ab')₂ fragment thereof, wherein said protein and anti-antibody or fragment thereof are capable of interacting with monoclonal antibodies or their fragments according to claim 17, so as to detect the presence of antibodies directed against *T. equigenitalis*, and

detecting any product formed in a reaction of the antigene antibody type.

28. (Amended) Method of diagnosis of an infection by *Taylorella equigenitalis* (*T. equigenitalis*) comprising:

bringing one or more monoclonal antibodies according to claim 17 or their fragments, into contact with a biological sample, and

detecting the reaction of the antigen-antibody type which is produced when *T. equigenitalis* is present in the sample.

30. (Thrice Amended) Kits for application of a method of identification of a bacterium of the species *Taylorella equigenitalis* (*T. equigenitalis*) in a specimen or in a culture, which include:

a monoclonal antibody or fragment according to claim 17,
reagents, for detecting the intended immunologic reaction,
optionally, reagents for blocking the non antigen-antibody reactions, and
instructions for use.

38. (Amended) A method of obtaining a protein selected from the group consisting of *Taylorella equigenitalis* (*T. equigenitalis*) immunogenic proteins and *T. equigenitalis* anti-antibodies, comprising the use of a monoclonal antibody or fragment according to claim 17.